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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,945

01/17/2006

Richard Wu

CH-7654/MD-02-12-186-ST

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BAYER MATERIAL SCIENCE LLC
100 BAYER ROAD
PITTSBURGH, PA 15205

EXAMINER

LAVILLA, MICHAEL E

ART UNIT

PAPER NUMBER

1775

MAIL DATE

DELIVERY MODE

08/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,945

Applicant(s)

WU ET AL.

Examiner

Michael La Villa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-22 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-22 and 24-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 July 2007 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
3. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 19-22 and 24-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding Claims 19 and 28, it is unclear what is meant by the phrase "having a reduced carbon fiber content which is 10% or less of the carbon fiber content of the material." The Specification refers to the carbon fiber content of the material in the Specification at page 3, line 6 through page 4, line 15. The carbon fiber content is characterized in terms of weight content and volumetric content. Hence, it is unclear whether the 10% level that is being claimed is based on weight or volume. The permitted level in the surface would differ depending on

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the basis of measurement, and so the claim scope cannot be definitely determined.

6. Regarding Claim 28, it is unclear whether the claimed "(1) removing graphite" step must achieve the claimed "surface having reduced carbon fiber content which is 10% or less of fiber content of the material," or not necessarily.

Response to Amendment

7. In view of applicant's amendments and arguments, applicant traverses the section 112, second paragraph rejection of the Office Action mailed on 8 March 2007. Rejection is withdrawn since it is rendered moot by applicant's amendment.
8. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Smith of the Office Action mailed on 8 March 2007. Rejection is withdrawn.
9. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Saubestre of the Office Action mailed on 8 March 2007. Rejection is withdrawn.
10. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Smith in view of Cornie of the Office Action mailed on 8 March 2007. Rejection is withdrawn.

Allowable Subject Matter

11. Claims 19 and 28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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12. Claims 20-22, 24-27, 29, and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The reviewed prior art does not teach or suggest the claimed subject matter of Claims 19-22 and 24-30. Particularly, the reviewed prior art does not teach or suggest the claimed metal/graphite material having a surface layer, characterized as claimed with reduced carbon fiber content, that is further coated with intermediate layer and metal coating, wherein the claimed compositional and structural limitations, as explicitly stated or implied by product-by-process limitations, are obtained.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa
11 August 2007


MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER